Increasing Access to Archival Information About Moving Images Through Linked Open Data

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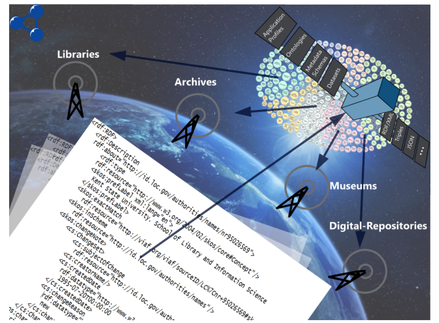
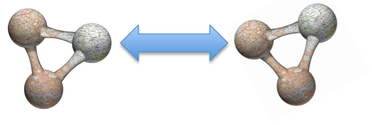


The Metadata Vocabulary Junction Project

This study currently in progress aims to show how libraries, archives, and museums (LAMs) can benefit from the data and metadata resources that have been created as a result of the Linked Open Data (LOD) movement.

Background

The LOD movement aims to connect related data formerly isolated in repositories (often called "silos") and not previously linked. Cultural heritage institutions generate valuable data through tools such as finding aids, cataloging records, and databases, but this information is often sequestered inside archival information systems that cannot be easily linked to other data sources.



Linked data technologies and LOD resources can enable LAMs to …

- ✓ Enhance their already existing cataloging records, finding aids and other services;
- ✓ Help users obtain new information and knowledge relevant to materials in their institution; and,
- ✓ Make their collections available to users of external databases.

Aligning Library/Archive/Museum Data with LOD Data Constructs

LAM Data Sources

- ➢ Library bibliographic records (MARC records, schema.org markup)
- ➢ Digital collection metadata (Dublin Core-based, other locally defined schemas)
- ➢ Archival description (MARC, EAD, PBCore, other description schema)
- ➢ Museum and visual resources object descriptions (VRA Core, other schema)

Personal, Family, and Corporate Bodies
Places and Events
Important Archival Access Points for Moving Images
Related Works
Topics and Genres/Forms

LOD Data Sources

- ➢ Ontologies (e.g., Ontology for Media Resources)
- ➢ Metadata Application Profiles (Dublin Core, PBCore-based, other locally defined profiles)
- ➢ Structured data in XML/RDF samples (e.g., LinkedMDB, Freebase)
- ➢ Associated documentation

Data Collection and Analysis Methods

LAM Information Systems

1. Analyze descriptive and authority standards to determine what information may be useful as linked data.
2. Review record exemplars from several sources to discover how standards are applied.
3. Identify and review other potential sources of information as needed.
4. Break down the records and find:
   - Common elements
   - Possibilities for linking data elements to LOD classes and properties
   - Major access points
   - Hidden access points

LOD Datasets

1. Identify relevant datasets
2. Analyze the source of the data structures
   - Ontologies used
   - Metadata schemas and application profiles
   - Structured data in XML/RDF examples
   - Documentation
3. Crosswalk their matching properties, indicating the matching level (broader, narrower, equivalent, or close match)
4. Identify major classes and properties useful to LAM data

Partial Alignment Example#1

PBCore to Ontology for Media Resources

Root: PBCore Class/ Property	Target: OMR Property	Property Mapping
pbCoreTitle	title	CM
pbCoreSubject	film_subject	CM
pbCoreCreator/ creator	creator	CM
pbCoreCoverage	location	N

Partial Alignment Example#2

MARC to LinkedMDB

Root: MARC Field	Target: LMDB Property	Property Mapping
245	film	CM
508	director	N
511	actor	N
655	film_genre	CM

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Research funded through the IMLS National Leadership Grant program.

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